

FIG.1

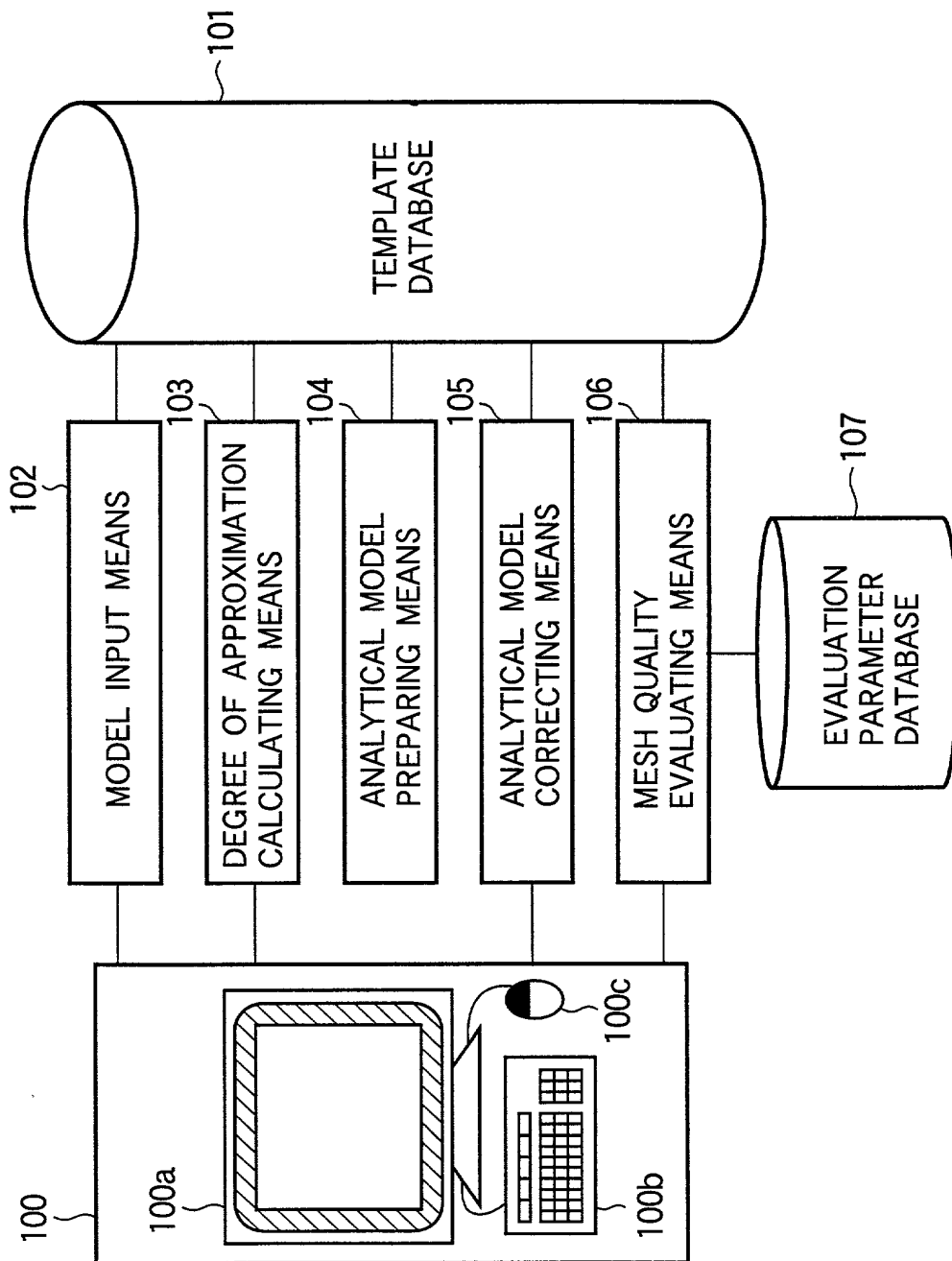


FIG.2

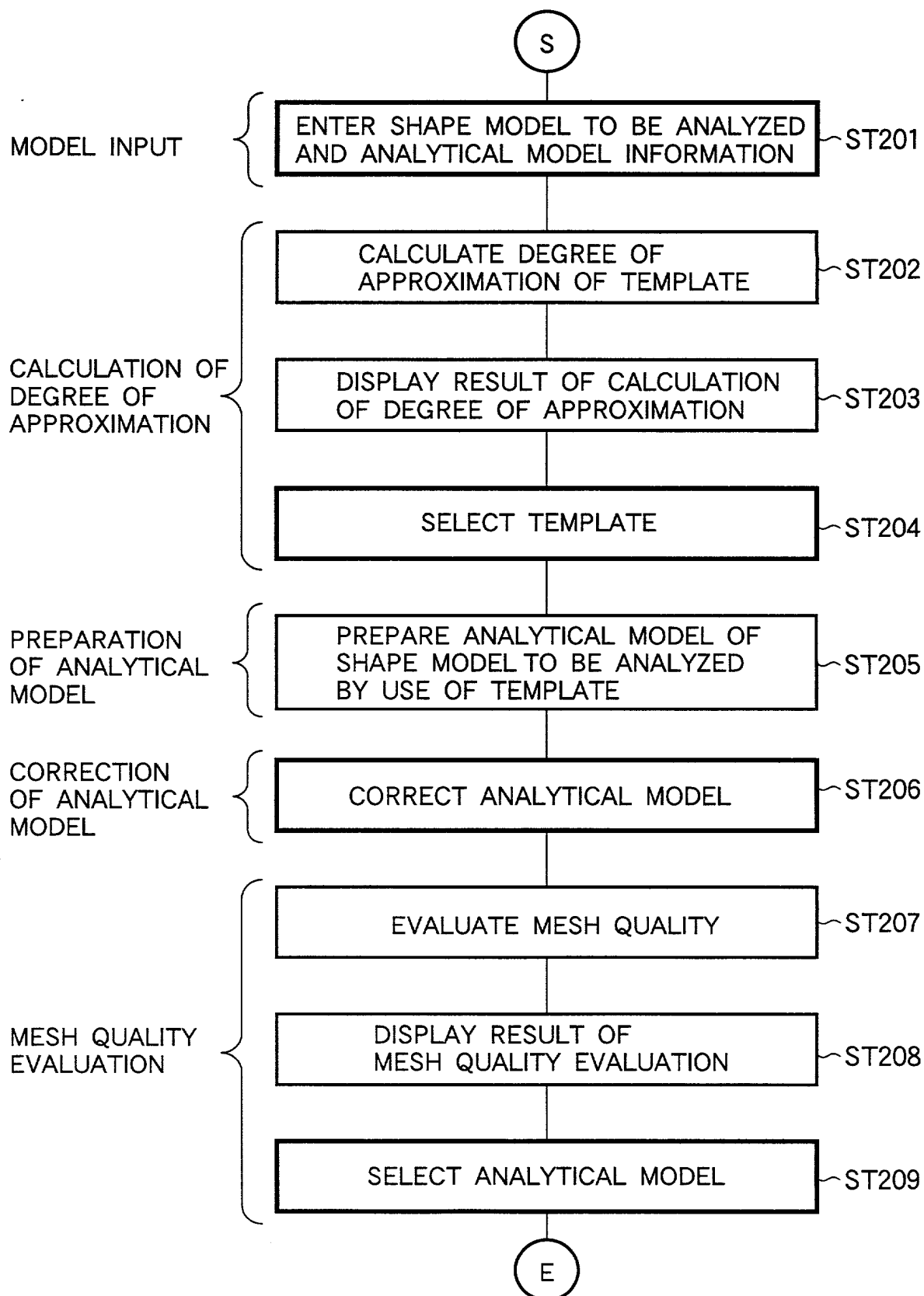


FIG.3

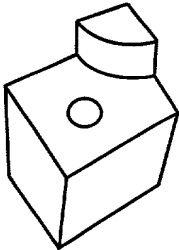
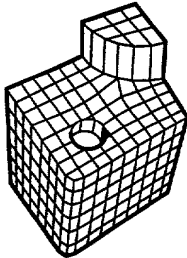
NO.	ANALYTICAL MODEL INFORMATION	SHAPE MODEL	ANALYTICAL MODEL		
1	<ul style="list-style-type: none"> • MODEL NAME • MODEL CLASSIFICATION • AREAS OF ANALYSIS 		ANALYTICAL MESH	MESH PREPARING CONDITION	ANALYTICAL CONDITION
				<ul style="list-style-type: none"> • ELEMENT TYPE • ELEMENT SIZE • DENSITY INFORMATION • NUMBER OF DIVISIONS • ASSIGNING DIRECTION 	<ul style="list-style-type: none"> • MATERIAL CONDITIONS • LOAD CONDITION • CONSTRAINT CONDITION • GEOMETRICAL CONDITION

FIG.4

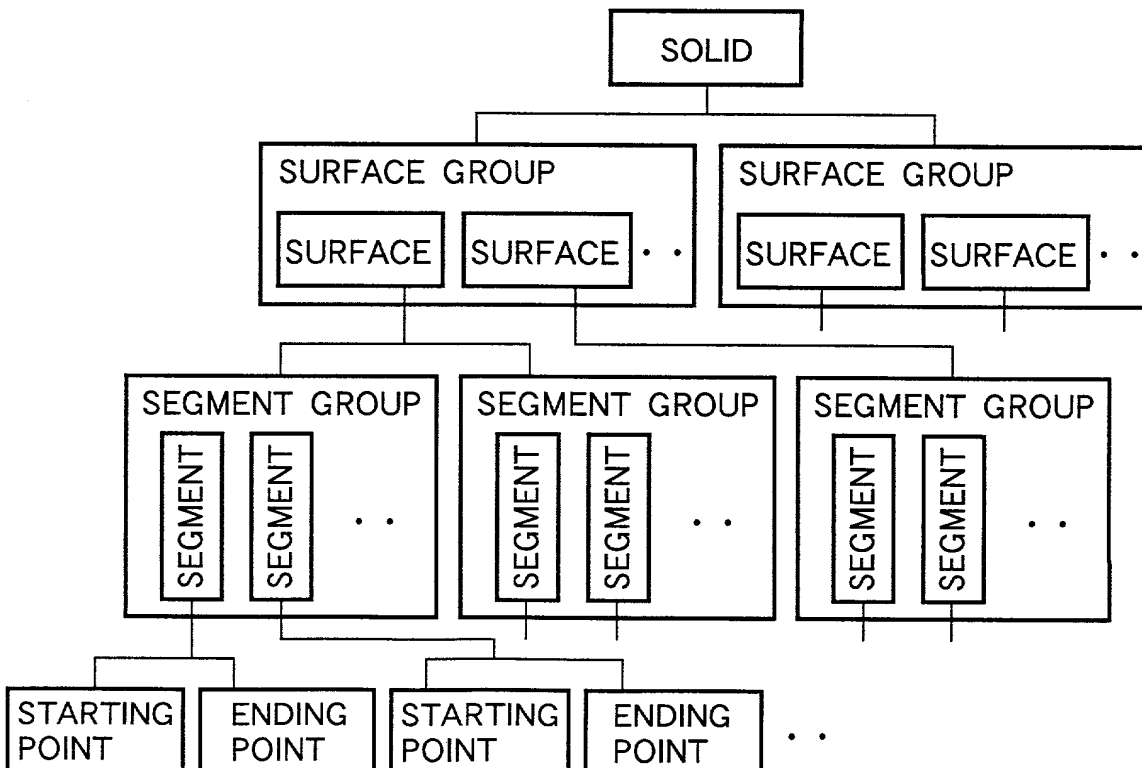


FIG.5

(a) EXAMPLE OF NODAL POINT DATA

TOTAL NUMBER OF NODAL POINTS	20		
NODAL POINT NO.	X COORDINATE VALUE	Y COORDINATE VALUE	Z COORDINATE VALUE
1	0.0	0.0	0.0
2	5.0	0.0	0.0
3	0.0		

(b) EXAMPLE OF ELEMENT DATA

TOTAL NUMBER OF ELEMENTS	20	
ELEMENT NO.	NUMBER OF NODAL POINTS	ELEMENT-COMPOSING NODAL POINT NO.
1	8	1, 2, 3, 4, 5, 6, 7, 8
2	8	2, 9, 10, 3, 6, 11, 12, 7
3	8	

FIG.6

NO. OF SHAPE ELEMENT TO BE ANALYZED	KIND	ELEMENT TYPE	ELEMENT SIZE
1	SOLID	HEXAHEDRON	3.0
3	SURFACE	TETRAHEDRON	2.5

FIG.7

(a) EXAMPLE OF DATA STRUCTURE

SHAPE ELEMENT NO.	KIND	LOCAL ELEMENT SIZE	ELEMENT SIZE CHANGE RATE
10	POINT	0.2	1.3

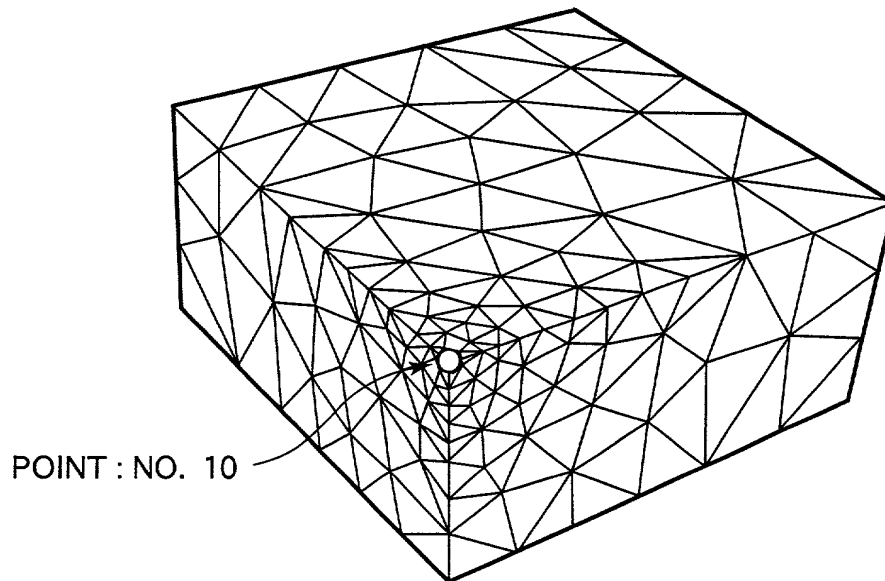
(b) EXAMPLE OF GENERATION OF TETRAHEDRON MESHES
(NON-UNIFORM DENSITY)

FIG.8

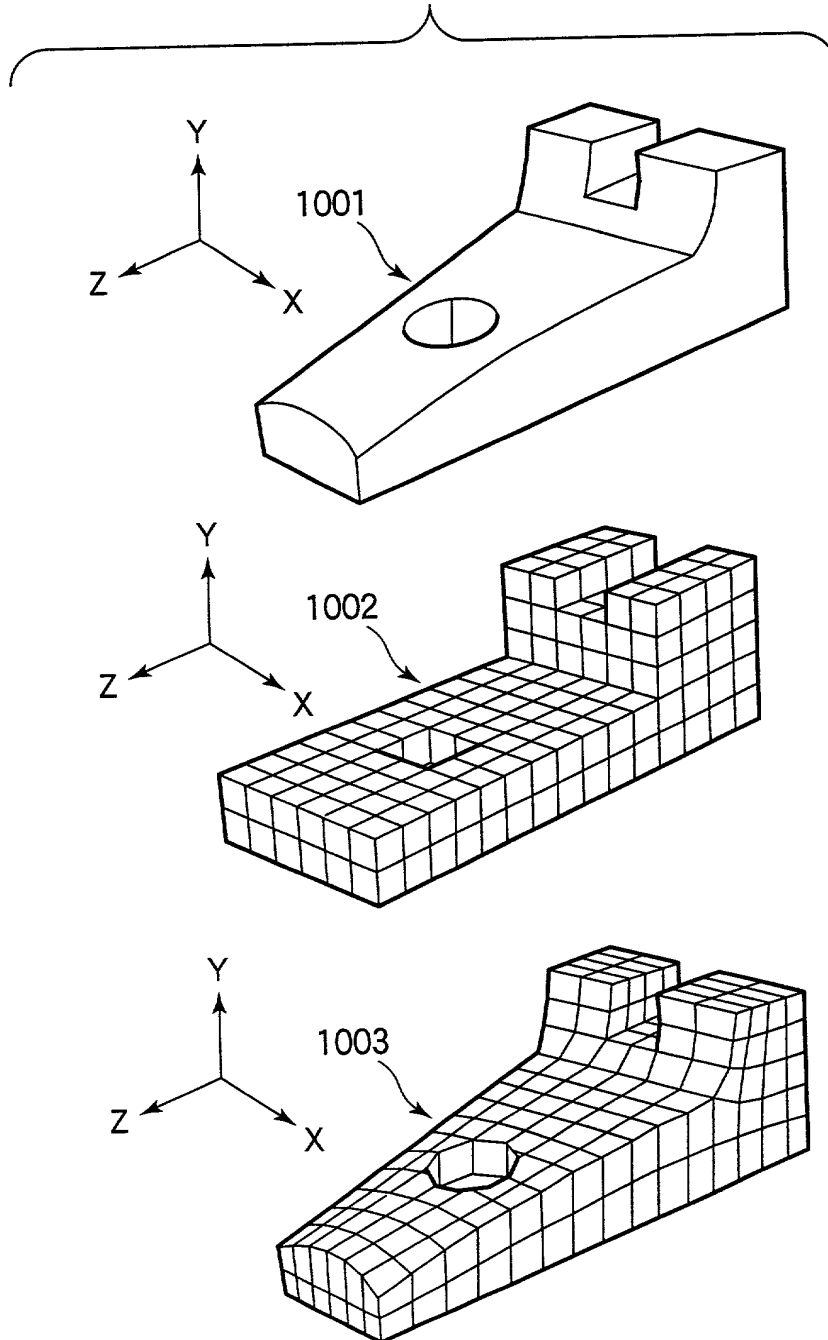
RIDGE NO.	NUMBER OF DIVISIONS
1	6
3	2

6/14

FIG.9

RIDGE NO.	ASSIGNING DIRECTION
1	+x
3	-z

FIG.10



202120-3006-001

FIG.11

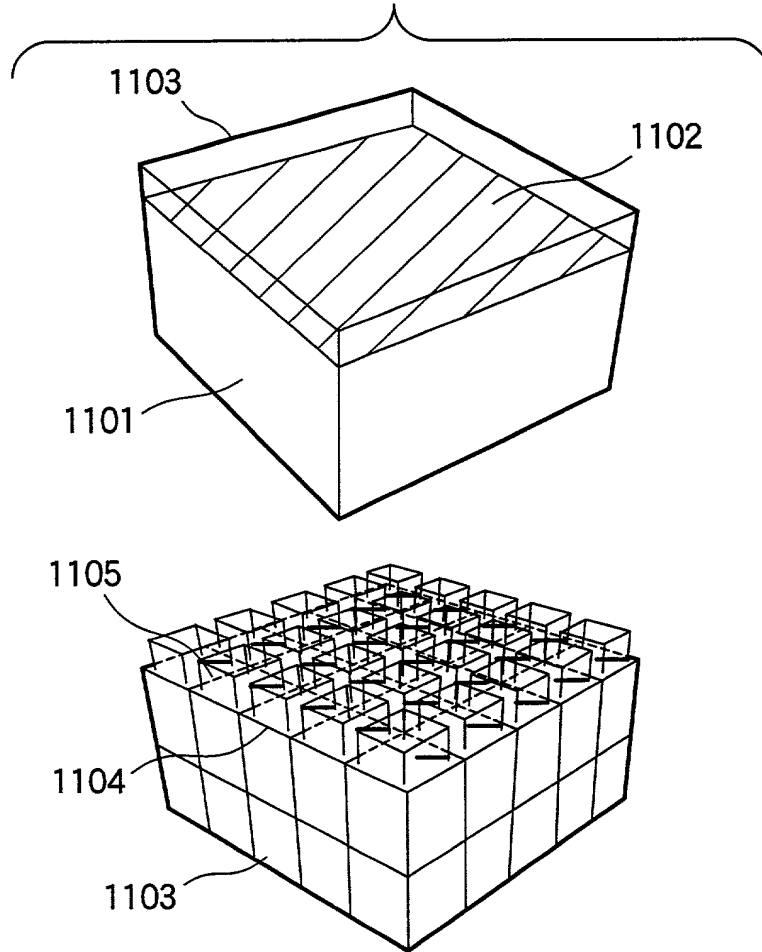
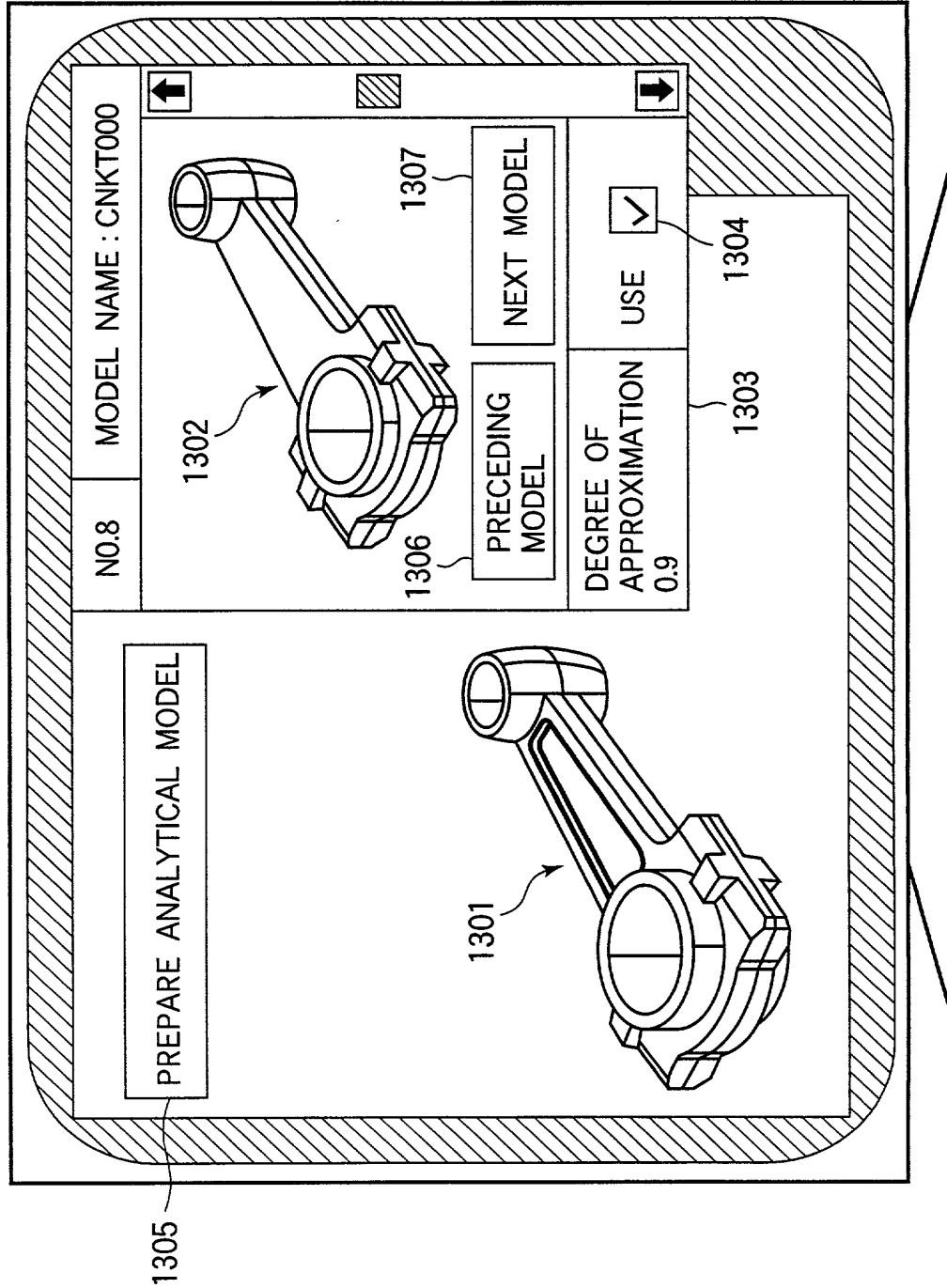


FIG.12

MODEL NAME	CNT001	1201
MODEL CLASSIFICATION	CONNECTION ROD	1202
AREA OF ANALYSIS	STRESS ANALYSIS	1203
1204	PREVIEW	
1205	EXECUTE	
THRESHOLD VALUE OF DEGREE OF APPROXIMATION		0.7
		1206

FIG.13



9/14

FIG.14

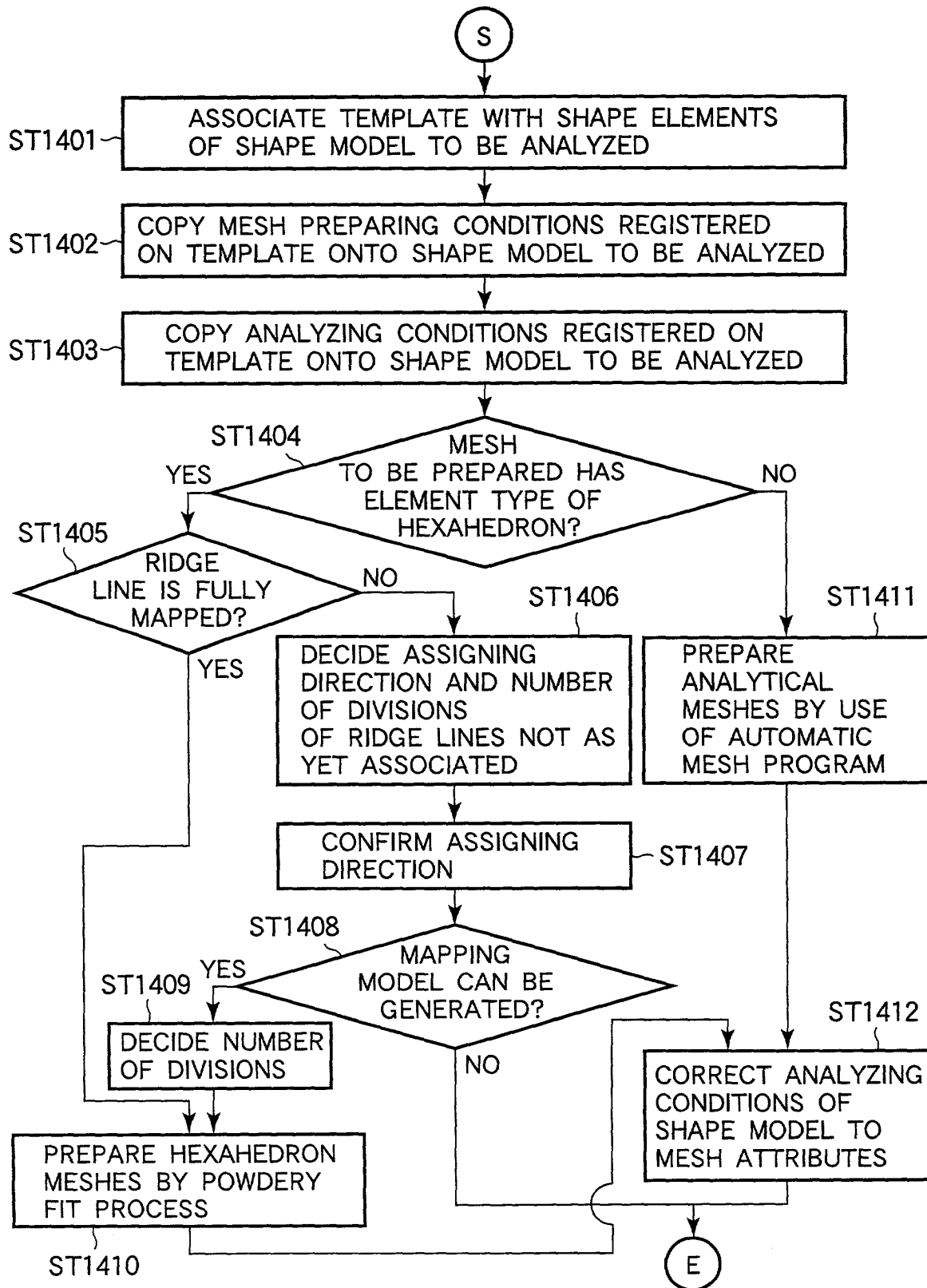
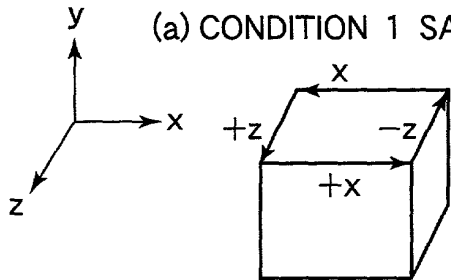
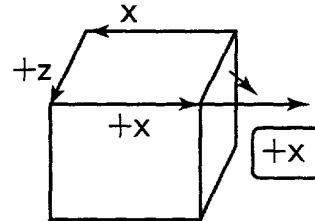


FIG.15

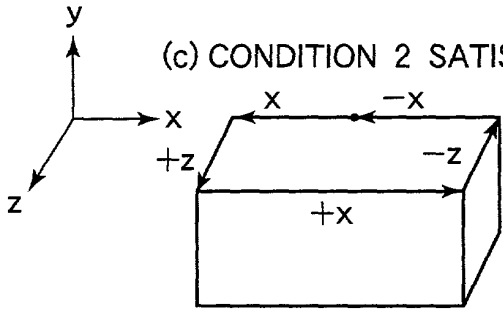
(a) CONDITION 1 SATISFIED



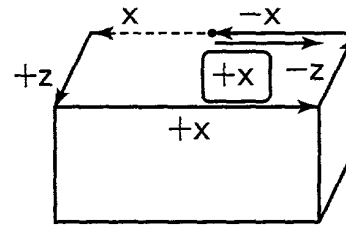
(b) CONDITION 1 NOT SATISFIED



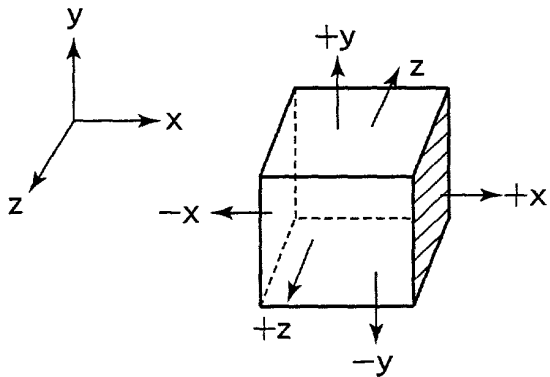
(c) CONDITION 2 SATISFIED



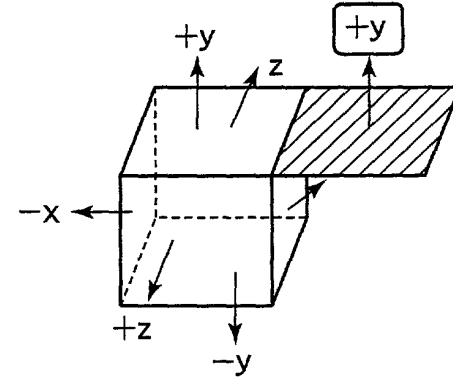
(d) CONDITION 2 NOT SATISFIED



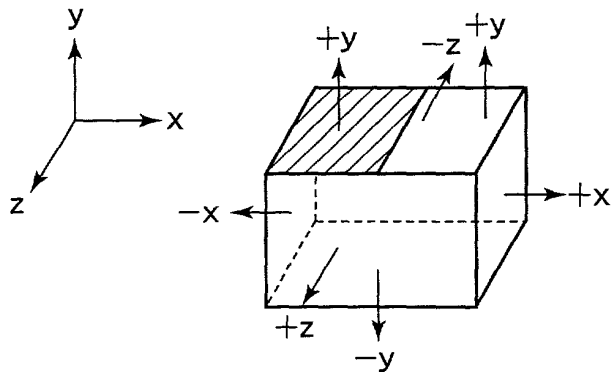
(e) CONDITION 3 SATISFIED



(f) CONDITION 3 NOT SATISFIED



(g) CONDITION 4 SATISFIED



(h) CONDITION 4 NOT SATISFIED

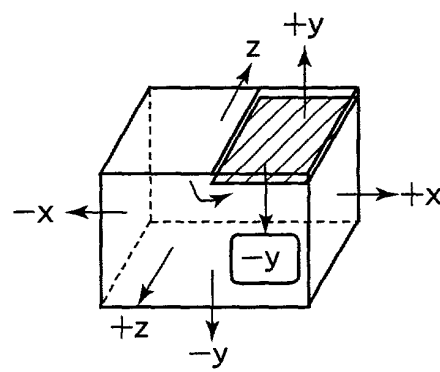


FIG.16

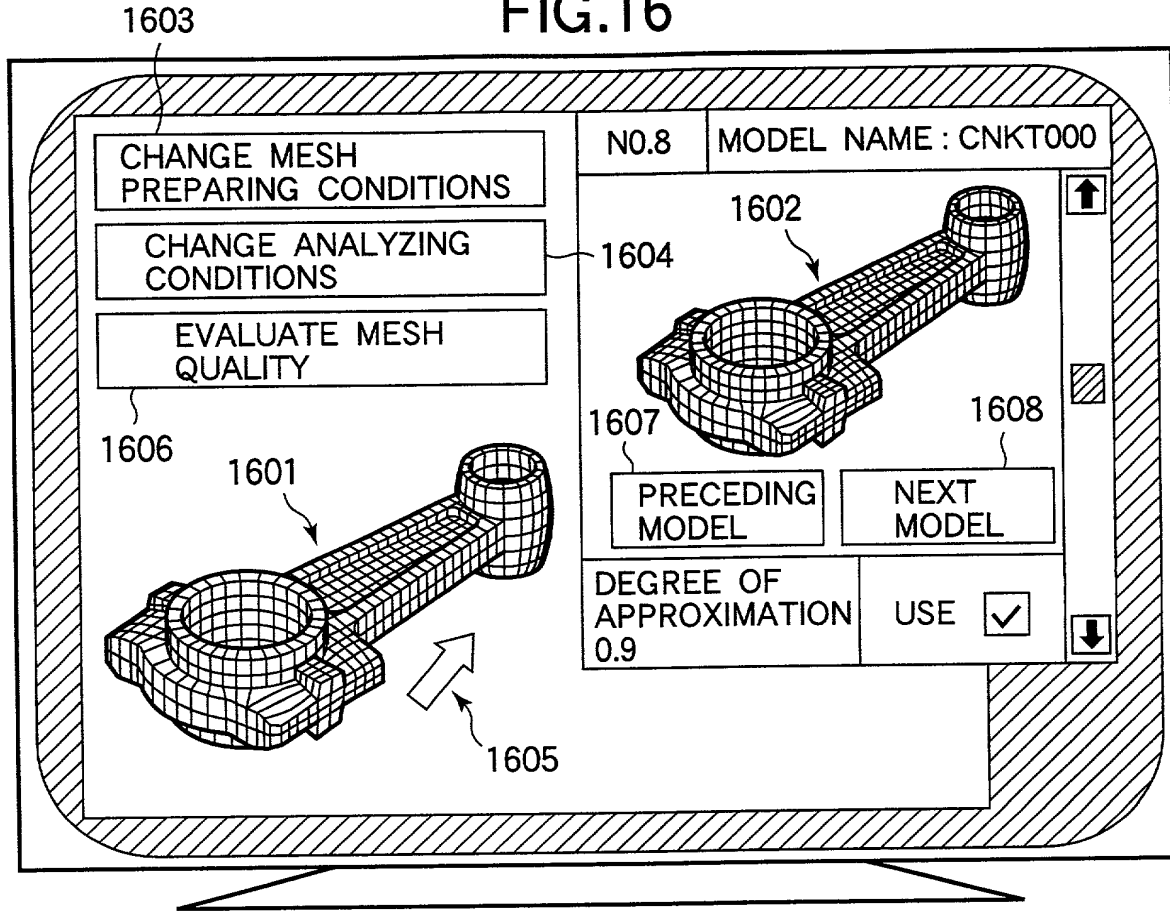


FIG.17

AREA OF ANALYSIS	MODEL CLASSIFICATION	DISTORTION THRESHOLD VALUE	STRETCH THRESHOLD VALUE	ELEMENT EDGE ANGLE THRESHOLD VALUE	ELEMENT SURFACE CAMBER THRESHOLD VALUE
DEFAULT	DEFAULT	0.2	NO_USE	NO_USE	NO_USE
STRESS ANALYSIS	CONNECTION ROD	0.2	0.2	160.0	NO_USE
VIBRATION ANALYSIS	ENGINE BLOCK	0.1	NO_USE	175.0	NO_USE
STRESS ANALYSIS	DEFAULT	0.2	NO_USE	NO_USE	NO_USE
STRESS ANALYSIS	SHAFT COVER	0.3	NO_USE	150.0	NO_USE

12/14
FIG.18

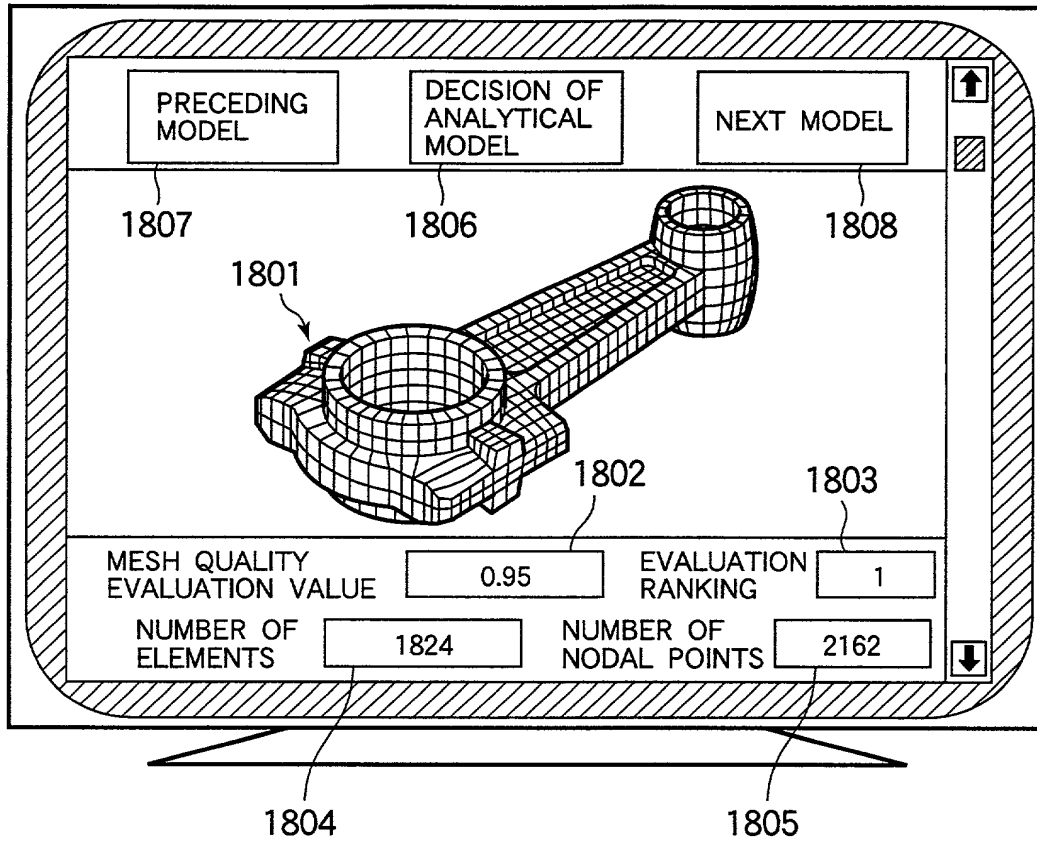


FIG.19

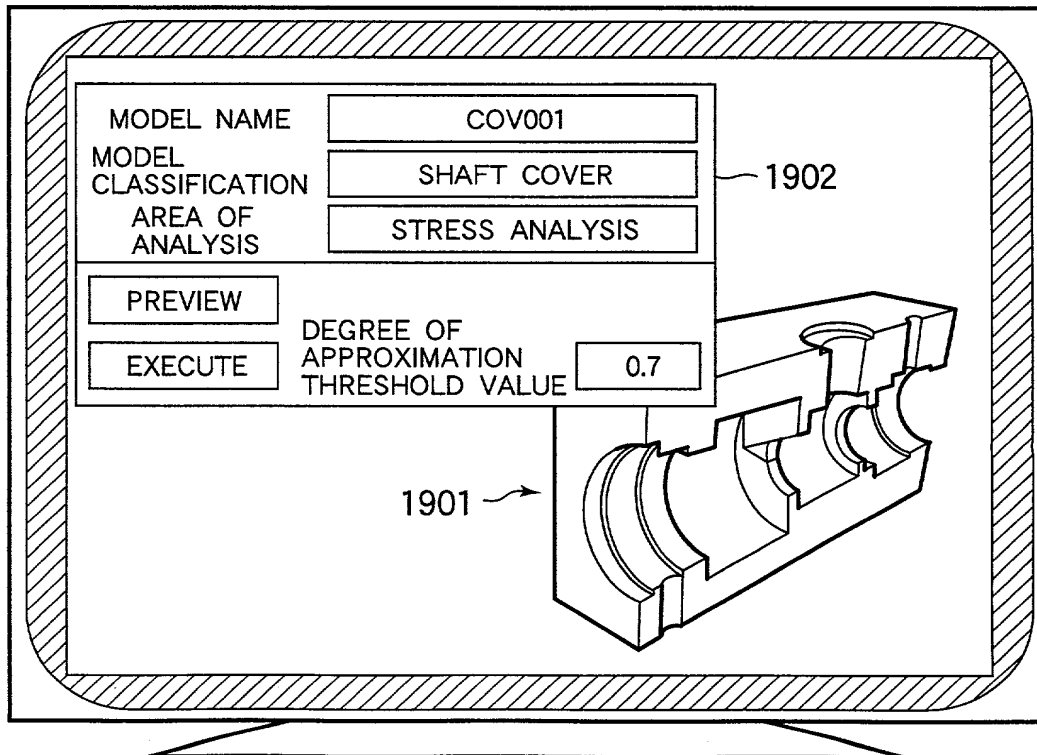


FIG.20

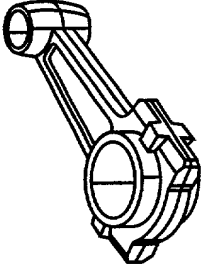
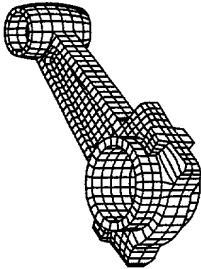
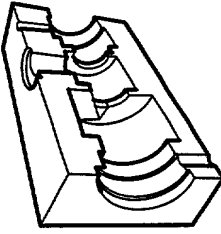
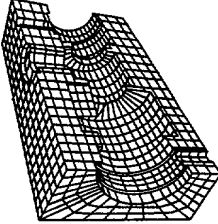
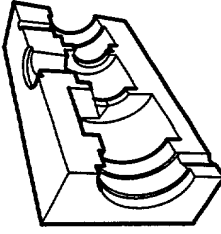
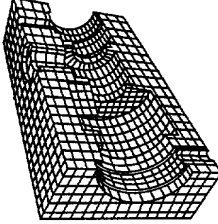
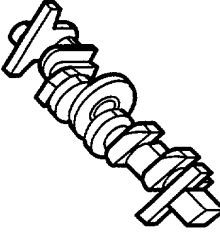
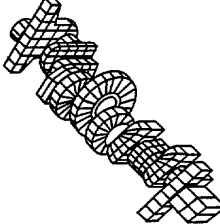
NO.	ANALYTICAL MODEL INFORMATION	SHAPE MODEL	ANALYTICAL MODEL		
			ANALYTICAL MESH	MESH PREPARING CONDITION	ANALYZING CONDITION
1	<ul style="list-style-type: none"> • MODEL NAME : CNKT001 • MODEL CLASSIFICATION : CONNECTION ROD • AREA OF ANALYSIS : STRESS ANALYSIS 			<ul style="list-style-type: none"> • ELEMENT TYPE : HEXAHEDRON 	
2	<ul style="list-style-type: none"> • MODEL NAME : COV001 • MODEL CLASSIFICATION : SHAFT COVER • AREA OF ANALYSIS : STRESS ANALYSIS 			<ul style="list-style-type: none"> • ELEMENT TYPE : HEXAHEDRON 	
3	<ul style="list-style-type: none"> • MODEL NAME : COV001 • MODEL CLASSIFICATION : SHAFT COVER • AREA OF ANALYSIS : VIBRATION ANALYSIS 			<ul style="list-style-type: none"> • ELEMENT TYPE : HEXAHEDRON 	
4	<ul style="list-style-type: none"> • MODEL NAME : CRA001 • MODEL CLASSIFICATION : CRANK SHAFT • AREA OF ANALYSIS : STRESS ANALYSIS 			<ul style="list-style-type: none"> • ELEMENT TYPE : TETRAHEDRON 	

FIG.21

